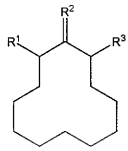
Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

Listing of Claims:

1. (Currently amended) [[A]] An *in vitro* method of suppressing [[a]] Janus tyrosine kinase 3 (Jak3)-dependent ~~function~~ proliferation of a cell expressing Janus tyrosine kinase 3, comprising:

selectively targeting Jak3 activity in the cell for inhibition by contacting the cell with at least one compound of the formula (I)



wherein

R^1 is H, $=CH_2$, $CH_2N(CH_3)_2$, $CH_2SC(O)CH_3$, $CH_2SC_6H_5$, CH_2SCH_2-(4-$C_6H_4OCH_3$), $CH_2SC(O)C_6H_5$ or $CH_2N(CH_2CH_3)_2$;

R^2 is O;

R^3 is $CH_2N(CH_3)_2$, $CH_2N(CH_2CH_3)_2$ or CH_2-(N-morphyl);

or a salt thereof, at a concentration effective to selectively inhibit Janus tyrosine kinase 3 activity, whereby [[a]] Jak3-dependent ~~function of said cell~~ proliferation of the cell is suppressed.

2. (Original) The method of claim 1 wherein R^1 is $CH_2N(CH_3)_2$ and R^3 is $CH_2N(CH_3)_2$.

3. (Original) The method of claim 2 wherein said compound is the meso stereoisomer.

4. (Currently amended) The method of claim 1 wherein the cell is of lymphoid or myeloid origin.

5. (Currently amended) The method of claim 1 wherein selectively inhibiting Jak3 activity ~~comprising interfering~~ interferes with the signal 3 pathway ~~in said cell by selectively inhibiting Jak3 activity~~, such that cell division is blocked.

6. (Previously presented) The method of claim 1 wherein, at said concentration effective to selectively inhibit said Janus tyrosine kinase 3, said at least one compound is non-inhibitory or is less inhibitory of protein tyrosine kinase activity other than Janus tyrosine kinase 3 activity.

7. (Original) The method of claim 1 wherein said cell is a T-cell expressing Jak3 and Janus tyrosine kinase 2 (Jak2), and the method comprises inhibiting Jak3 activity at least 3 fold more than inhibiting Jak2 activity in said T-cells.

8. (Original) The method of claim 1 comprising choosing at least one said compound which is less capable of inhibiting Jak2 and Stat5a/b activation by prolactin (PRL) at a concentration sufficient to inhibit Jak3 and Stat5a/b activated by IL2.

9-10. (Canceled)

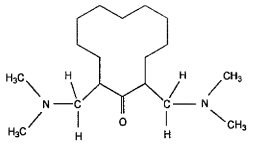
11. (Currently amended) The method of claim [[10]] 51 wherein said cell is a T-cell and said amount of said pharmaceutical composition is effective to block cell division in said T-cell.

12. (Currently amended) The method of claim [[10]] 51 comprising continuously administering said pharmaceutical composition to the ~~subject~~ allograft recipient.

13-30. (Canceled)

31. (Currently amended) [[A]] An *in vitro* method of suppressing [[an]] undesired Janus tyrosine kinase 3-dependent ~~function~~ proliferation of a cell expressing Janus tyrosine kinase 3, comprising:

selectively targeting Janus tyrosine kinase 3 activity in the cell for inhibition by contacting the cell with a compound of the formula



or a salt thereof, at a concentration effective to selectively inhibit the activity of said Janus tyrosine kinase 3~~, to suppress an~~ and thereby suppressing undesired Janus tyrosine kinase 3-dependent proliferation of said cell.

32-34. (Canceled)

35. (Currently amended) The method of claim [[10]] 51 comprising periodically administering said pharmaceutical composition to the ~~subject~~ allograft recipient.

36. (Currently amended) The method of claim [[36]] 4 wherein said cell ~~of immune origin~~ is selected from the group consisting of T-cells, B-cells, natural killer (NK) cells and monocytes.

37. (Currently amended) The method of claim 11 wherein said undesired function comprises a T-cell mediated immune response, and wherein blocking cell division in a plurality of said T-cells provides T-cell mediated immunosuppression in said ~~subject~~ allograft recipient.

38. (Currently amended) The method of claim [[10]] 51 wherein suppression of said undesired Jak3-dependent cell function comprises interfering with the signal 3 pathway in the cell.

39. (Canceled)

40. (Previously presented) The method of claim 1 wherein R^1 is H.

41. (Previously presented) The method of claim 1 wherein R^1 is $=CH_2$.

42. (Previously presented) The method of claim 1 wherein R^1 is $CH_2N(CH_3)_2$.

43. (Previously presented) The method of claim 1 wherein R^1 is $CH_2SC(O)CH_3$.

44. (Previously presented) The method of claim 1 wherein R^1 is $CH_2SC_6H_5$.

45. (Previously presented) The method of claim 1 wherein R^1 is CH_2SCH_2-(4-$C_6H_4OCH_3$).

46. (Previously presented) The method of claim 1 wherein R^1 is $CH_2SC(O)C_6H_5$.

47. (Previously presented) The method of claim 1 wherein R^1 is $CH_2N(CH_2CH_3)_2$.

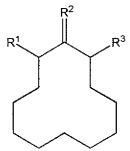
48. (Previously presented) The method of claim 1 wherein R^3 is $CH_2N(CH_3)_2$.

49. (Previously presented) The method of claim 1 wherein R^3 is $CH_2N(CH_2CH_3)_2$.

50. (Previously presented) The method of claim 1 wherein R^3 is CH_2-(N-morphyl).

51. (New) An *in vivo* method of suppressing an undesired Jak3-dependent function of a cell expressing Janus tyrosine kinase 3 (Jak3) in a mammalian allograft recipient, comprising:

administering to said allograft recipient a therapeutically effective amount of a pharmaceutical composition containing at least one compound of the formula (I)



wherein

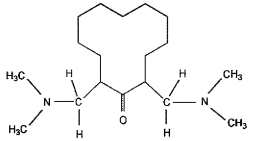
R^1 is H, $=CH_2$, $CH_2N(CH_3)_2$, $CH_2SC(O)CH_3$, $CH_2SC_6H_5$, CH_2SCH_2-(4-$C_6H_4OCH_3$), $CH_2SC(O)C_6H_5$ or $CH_2N(CH_2CH_3)_2$;

R^2 is O;

R^3 is $CH_2N(CH_3)_2$, $CH_2N(CH_2CH_3)_2$ or CH_2-(N-morphyl),

or pharmaceutically acceptable salt thereof, in a pharmaceutically acceptable carrier, to suppress proliferation of a cell expressing Jak3 in said recipient to treat allograft rejection in said recipient.

52. (New) The method of claim 51 wherein one said compound is represented by the formula



or a salt thereof.

53. (New) The method of claim 51, wherein said administering of said composition enhances allograft survival in said mammalian allograft recipient.

54. (New) The method of claim 51 wherein R^1 is H.

55. (New) The method of claim 51 wherein R^1 is $=CH_2$.

56. (New) The method of claim 51 wherein R^1 is $CH_2N(CH_3)_2$.

57. (New) The method of claim 51 wherein R^1 is $CH_2SC(O)CH_3$.

58. (New) The method of claim 51 wherein R^1 is $CH_2SC_6H_5$.

59. (New) The method of claim 51 wherein R^1 is CH_2SCH_2-(4-$C_6H_4OCH_3$).

60. (New) The method of claim 51 wherein R^1 is $CH_2SC(O)C_6H_5$.

61. (New) The method of claim 51 wherein R^1 is $CH_2N(CH_2CH_3)_2$.

62. (New) The method of claim 51 wherein R^3 is $CH_2N(CH_3)_2$.

63. (New) The method of claim 51 wherein R^3 is $CH_2N(CH_2CH_3)_2$.

64. (New) The method of claim 51 wherein R^3 is CH_2-(N-morphyl).